# COMMENT RESPONSE SUMMARY DOGM LETTER OF JANUARY 25, 2005

## R647-4-101

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The MRP has been changed to reflect the Division's comment regarding the eligibility of the single NRHP-eligible site on the mine property (refer to section 6.9.1).

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All contour lines on maps showing topography have been labeled with their elevation.

The locations of the topsoil stockpiles have been added to the reclamation treatment maps.

#### R647-4-106.5

BRI appreciates the Division's advice regarding the company's planned soil evaluation program and will take that advice into account as the program is developed. BRI looks forward to the Division's ongoing advice as this effort proceeds.

Section 1.0, Mining and Permitting Background, describes BRI's experience with the use of tuff overburden as a growth medium. The use of tuff for growth medium and disposal of waste tuff where it would potentially contact soils placed during reclamation was stopped in the mid-1980s when BRI determined that the tuff would not support vegetative growth. Since that time, tuff overburden has been placed in pit backfills or buried in "tuff disposal cells" in waste rock dumps and covered with rhyolite waste rock. Tuff overburden will continue to be handled in this manner in the future. Waste rock dump surfaces will be comprised of rhyolite waste rock, which has not been shown to be detrimental to plant growth.

#### R647-4-106.6

Section 5.6 has been modified to state that live-hauling of topsoil will be done when disturbed surfaces designated to receive topsoil are available and ready for reclamation. The Executive Summary has also been changed to reflect this text change.

The availability of topsoil for salvage is shown on Plate 3, the Soils Map. Areas from which soil has previously been removed as part of prior pit and dump development are color-coded and designated "no soil" (NS). All salvageable soil types will be recovered. The portion of the Rainbow project area labeled "topsoil stripped" in Plate 7D refers to

an area from which topsoil was salvaged in the past; it is one of the no-soil areas. All available topsoil will be recovered in the estimated thicknesses and quantities described in Section 5.6.

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Topsoil stockpile locations have been added to the reclamation treatments maps (Figures 6A to 10). The commitment to ripping the topsoil stockpile sites after the soil has been used for reclamation has been added on each of the reclamation treatment maps and in Section 7.4.3.

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Please refer to revisions in section 5.7 of the modified MRP. BRI's Multi-sector General Permit for Storm Water Associated with Industrial Activities and the associated Storm Water Pollution Prevention Plan describes the company's approach to management of storm water during operations.

## R647-4-109.3

Please refer to the revised text section 5.6 of the modified MRP.

#### R647-4-110.2

BRI understands its obligations to reclaim roads that are permanently closed with Juab County approval. The second paragraph on page 7 of the MRP describes BRI's commitment in this regard. Also, please refer to the modification in Section 7.3.

Regarding BRI's commitment to rip all roads and compacted surfaces, please refer to the revised text in the second paragraph of section 7.3 in the modified MRP.

BRI's existing open pits have been very stable over the nearly 40 years that the mine has been in operation. Most instability problems have been minor intra-bench rock slides. In the past larger, slow-moving rotational highwall failures have occurred; however, BRI has identified the cause of these failures and has learned how to prevent them with minor changes in highwall design. Please refer to Section 8.2 for a detailed explanation of highwall stability.

#### R647-4-110.3

BRI is aware of the requirement to notify the Division of a change to the approved notice of intention, whether it may result in a plan amendment or revision, and will comply in accordance with RuleR647-4-119.

#### R647-4-110.5

Table 7.11-1 has been modified to include deep surface ripping of all dump and pit backfill surfaces as part of BRI's standard reclamation treatments.

Regarding the revegetation seed mix for the landfill, please see the new paragraph following the second paragraph of section 7.11.2. Upon final reclamation or closure of the landfill, whichever occurs first, BRI will cover the landfill with five or more feet of

rhyolite waste rock borrowed from the adjacent waste rock dumps before replacing topsoil. As a result, the standard reclamation seed mix should be used for the landfill reclamation. Regarding the Division of Solid and Hazardous Waste's rules for Class IIIb landfills, Rule R315-305-5(5)(b)(iv) allows "...seeding the cover with grass, other shallow rooted vegetation or [emphasis added] other native vegetation." With the flexibility allowed in the rule and the additional cover provided by the layer of waste rock, the need for shallow-rooting vegetation in the landfill seed mix, especially given the location of the landfill, is not demonstrated. Both fourwing saltbush and shadscale have been established successfully in previously reclaimed areas at the mine and BRI considers them to be valuable to the reclamation effort.

Table 7.11-1 has been revised to correctly state that all dump slopes, regardless of whether topsoil is available to be placed on them, will be seeded with the reclamation seed mix.

The commitment to apply seed during late fall or early winter has been added to the first paragraph in section 7.10.

BRI has fully understands the need to obtain DOGM approval for changes to its reclamation plan and methods. See the last sentence in the second paragraph of section 7.11.2 in the initial version of the MRP.

BRI will use the cost for the currently contemplated soil amendment approach for its surety amount calculations and provide cost estimates for the unit costs for all other methods.

#### R647-4-111.2

The MRP has been revised to describe any changes in the site hydrologic conditions that will result from the proposed Phase I mining activities, the impacts to site hydrology from mining, reclamation-related hydrologic concerns, and variance requests. Specifically, no drainage diversions are planned for Phase I operations; therefore no map revisions have been made. Please refer to the following text sections where text modifications have been made: Executive Summary, 3.5, 3.6, 4.5, 4.8, 5.7, 6.4.2, 7.5, and 8.3.

#### R647-4-111.7

A request for a variance from the requirement that pit slopes stand at or be regraded to an angle of less than 45 degrees was included in the initial version of the MRP in section 8.2 and has been revised to demonstrate that the design pit slopes will be stable and the variance is justified.

#### R647-4-111.9

No non-free draining impoundments will remain following reclamation except for the ponds in the open pit bottoms. Based on past experience, it is anticipated that all open pits will or may have standing water in them seasonally and some will retain water year-

round. A request for a variance from Rule R647-4-111 is provided in section 8.4 of the MRP. Also, refer to the revised discussion of drainage and sediment control in sections 3.6, 4.8, 5.7, and 6.4.

## R647-4-112

A request for a variance for impoundments that are not self-draining has been added to the MRP; please refer to Section 8.4.

An Environmental Assessment prepared for BLM in 1999 prior to a previous MRP (subsequently approved by both DOGM and BLM) described wildlife use of impounded water in the area as beneficial to both antelope and chukkar. Since there is no other surface water source in the area and some of the open pits have contained standing water for over 20 years, it is probable that the wildlife that use these water sources rely upon these sources. The absence of these water sources would limit or eliminate wildlife use of the mine area; therefore, their presence supports the intended postmining land use.

Past variances have been granted for a number of reasons. Blocky rhyolite was selected as the preferred surface material for final dump construction in 1988. Prior to that time, dump surfaces had been covered with tuff for use as a growth medium as directed by the Division. Refer to Sections 1.0 (page 9) of the MRP, Mine Permitting and Background, and Section 3.7.3, Tuff-derived Soils, for information on the early reclamation efforts involving tuff-covered dumps. An explanation of the reasons that the practice of using waste tuff as dump cover was stopped and the Division granted variances from all reclamation requirements for dumps that had been covered with tuff is provided in Section 1.0. See also Figure 10 and Appendix 4 of the MRP for further information on mine reclamation and variances.

Section 8.0 with accompanying modifications describes all variances currently sought by BRI for future operations. All disturbances that are proposed during Phase I LMU development, regardless of whether they affect areas that have been previously reclaimed or released from reclamation requirements by a variance, will be reclaimed unless variances have been requested in the modified MRP and approved by the Division. Past revisions of the MRP have been supported by separate volumes including all correspondence between BRI, the Division, and BLM. As stated in revisions to Section 8.0, these volumes are included herein by reference.

Section 8.4 has been revised to further explain BRI's understanding of the applicability of Rule R647-4-111.13. BRI takes exception to the Division's statement that "generally an operator needs to seed three times before the Division will apply this rule. Establishing a state-wide requirement or guideline for three seeding episodes before any consideration for a variance can be given is too arbitrary given the diversity of site conditions and climate in the state. In addition, it is not consistent with the Division's past decisions regarding variances from Rule R647-4-111.13 at the Topaz mining property.

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